

CLAIMS

What is claimed is:

1. A method for processing member information provided within a file comprised of member and non-member information, without exchanging non-member personal information,

5 the method comprising:

receiving transaction information, including member and non-member personal information, where the personal information has been converted into unique transaction fingerprints;

compiling member information, including member personal information;

10 converting the member personal information into unique member fingerprints;

comparing the unique transaction fingerprints to the unique member fingerprints and producing a list of matching fingerprints; and

processing transaction information associated with each of the matching fingerprints.

2. The method as recited in claim 1, wherein the member and non-member personal
15 information is converted by using a one-way hash function.

3. The method as recited in claim 1, wherein the member and non-member personal information is comprised of information selected from the group consisting of a credit card number for the member or non-member, a name for the member or non-member, an address for the member or non-member, a telephone number for the member or non-member, an e-mail
20 address for the member or non-member, or any other personal identifier for the member or non-member.

4. The method as recited in claim 1, wherein the member and non-member personal information is identical in format and type.

5. A computer-readable media having instructions for processing member information provided within a file comprised of member and non-member information, without exchanging non-member personal information, the instructions for performing these steps comprising:

receiving transaction information, including member and non-member personal

5 information, where the personal information has been converted into unique transaction fingerprints;

compiling member information, including member personal information;

converting the member personal information into unique member fingerprints;

comparing the unique transaction fingerprints to the unique member fingerprints and

10 producing a list of matching fingerprints; and

processing transaction information associated with each of the matching fingerprints.

6. The computer-readable media as recited in claim 5, wherein the personal information is converted by using a one-way hash function.

7. The computer-readable media as recited in claim 5, wherein the member and non-
15 member personal information is comprised of information selected from the group consisting of a credit card number for the member or non-member, a name for the member or non-member, an address for the member or non-member, a telephone number for the member or non-member, an e-mail address for the member or non-member, or any other personal identifier for the member or non-member.

20 8. The computer readable media as recited in claim 5, wherein the member and non-member personal information is identical in format and type.

9. A method for determining if a transaction by a member consumer meets requirements provided by a rewards program, the method comprising:

receiving transaction information, including information from the group consisting of identifying a consumer, information identifying a business and information pertaining to the purchase of a good or service by the consumer, where the information identifying a consumer has been converted into unique transaction fingerprints;

5 providing member consumer information, including information identifying a member consumer;

 converting the information identifying a member consumer into unique member fingerprints;

 comparing the unique transaction fingerprints to the unique member fingerprints;

10 producing a list of matching fingerprints; and

 processing transaction information associated with each of the matching fingerprints, including information identifying a consumer, information identifying a business and information pertaining to the purchase of a good or service by the consumer, wherein transaction information for non-member consumers is not processed;

15 determining if the business identified in the transaction information is a member business; and

 if it is determined that the consumer is a member consumer and the business is a member business, determining if the information pertaining to the purchase of a good or service by the consumer at the business meets the requirement of the rewards program.

20 10. The method as recited in claim 9, wherein the transaction information includes information selected from the group consisting of information identifying a consumer, information identifying a business and information pertaining to the purchase of a good or service by the consumer.

11. The method as recited in claim 9, wherein the information identifying a consumer and the information identifying a member consumer is comprised of information selected from the group consisting of a credit card number for the consumer or member consumer, a name for the consumer or member consumer, an address for the consumer or member consumer, a
5 telephone number for the consumer or member consumer, an e-mail address for the consumer or member consumer, or any other personal identifier for the consumer or member consumer.

12. The method as recited in claim 9, wherein the information identifying a consumer and the information identifying a member consumer are identical in format and type.

13. The method as recited in claim 10, wherein the information pertaining to the
10 purchase of a good or service by the consumer at the business comprises information selected from the group consisting of a sales amount, a day of sale, and a time of sale.

14. The method as recited in claim 9, wherein the information identifying a consumer and the information identifying a member consumer are converted into unique transaction fingerprints and unique member fingerprints, respectively, by using a one-way hash function.

15. A method for allowing a consumer to receive benefits associated with an incentive
15 program created by a business, the method comprising:

accepting a registration of a member consumer entitling the member consumer to benefits of the incentive program, the registration including information identifying a member consumer;

converting the information identifying the member consumer into a unique member
20 fingerprint;

receiving transaction information, including information identifying a consumer, where the information identifying a consumer has been converted into a unique transaction fingerprint;

comparing the unique member fingerprint to the unique transaction fingerprint and
producing a list of matching fingerprints;

processing transaction information associated matching fingerprints and determining if
the consumer performed a transaction at a member business; and

5 rewarding the member consumer in accordance with the benefits of the incentive program
if it is determined that the consumer did perform a transaction at the member business.

16. The method as recited in claim 15, wherein the information identifying a member
consumer and the information identifying a consumer is comprised of information selected from
the group consisting of a credit card number for the consumer or member consumer, a name for
10 the consumer or member consumer, an address for the consumer or member consumer, a
telephone number for the consumer or member consumer, an e-mail address for the consumer or
member consumer, or any other personal identifier for the consumer or member consumer.

17. The method as recited in claim 15, wherein the information identifying a member
consumer and the information identifying a consumer are identical in format and type.

15 18. The method as recited in claim 15, wherein the transaction information is comprised
of information selected from the group consisting of a sales amount, a day of sale, and a time of
sale.

19. The method as recited in claim 15, wherein the information identifying a member
consumer and the information identifying a consumer is converted by using a one-way hash
20 function.

20. A computer-readable media having instructions for determining if a transaction by a
member consumer meets a requirement of a rewards program of a member business, the
instructions for performing these steps comprising:

receiving transaction information, including information identifying a consumer, where the information identifying a consumer has been converted into unique transaction fingerprints;

providing member consumer information, including information identifying a member consumer;

5 converting the information identifying a member consumer in unique member fingerprints;

comparing the unique transaction fingerprints to the unique member fingerprints;

producing a list of matching fingerprints; and

processing transaction information associated with each of the matching fingerprints,

10 wherein transaction information for non-member consumers is not processed;

determining if the business identified in the transaction information is a member business; and

if it is determined that the consumer is a member consumer and the business is a member business, determining if the information pertaining to the purchase of a good or service by the

15 consumer at the business meets the requirement of the rewards program.

21. The computer readable media as recited in claim 20, wherein the transaction information includes information selected from the group consisting of information identifying a consumer, information identifying a business and information pertaining to the purchase of a good or service by the consumer.

20 22. The computer-readable media as recited in claim 20, wherein the transaction information and consumer information is converted into unique transaction fingerprints and unique member fingerprints by using a one-way hash function.